

TAKE & MAKE KIT

Dinosaurs

TIME: 30-45 min

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What's in this kit?

The first ever complete dinosaur fossil, called Scelidosaurus, was discovered in England in 1850. In 2020, the specimen was fully studied again by a research team at the University of Cambridge's Department of Earth Sciences in England. Their findings, along with the 170 years of research in the field of paleontology helped link that dinosaur to its place in the dinosaur family tree. In this kit you will excavate a dig site and prepare the piece as if it were to be displayed in a museum.

You will learn:

- Paleontology
- Museum preparation

Let's Get Started!

Materials

Plaster mixture
Dinosaur toy
Small objects (optional)
Water
Cardboard
Art supplies

Tools

Tape or glue
Plastic spoon
Wooden stick
Paintbrush
Scissors (optional)

Step 1 - Recreate a dig site

Have a friend pick some small materials to excavate. Put these items and the toy dinosaur into the bag with the plaster mixture. This mix is made of plaster, sand and organic material. Wear gloves or wash your hands carefully if any gets on your skin.



To activate the mixture, measure half a cup of water and pour it into the bag a little at a time. Zip the bag and massage the mixture until it is all saturated. It will look and feel like wet sand. Set it aside for 15-20 minutes to come together.



Step 2 - Create a display case

Your dinosaur will need a new home when it's all excavated and prepared for exhibition. Recycle a box or pieces of cardboard to build a display case for the dinosaur. Use whatever supplies you may have available. Gather art supplies or materials you find outdoors to create this environment.



Vocabulary

Paleontology - The study of the history of life on Earth as understood from fossils

Excavating - To remove earth carefully and systematically from an area in order to find buried remains

Step 3 - Excavate your specimen

If you have patience you can wait overnight for the plaster mixture to harden more. If not, you can begin excavating after the suggested 15-20 minutes.

Use your digging tools as much as possible for a hands free challenge. The plastic spoon is like a shovel, the wooden stick is like a pick, and the brush is like one a paleontologist might have in their field kit.



Step 4 - Clean your specimen

When a specimen is discovered in the field, the bones are removed from the site, carefully packaged and then shipped to institutions like museums and schools. From there, it can take many months to prepare them for research and display.

Rinse your brush clean and use it to remove any remaining debris. Treat the bones with care like a researcher discovering it for the first time.

Did You Know?

The tools paleontologists use today are the same exact kind used by the first paleontologists. Some common tools in a paleontologist's field kit are chisels, hammers, brushes, collection bags, and rulers.



Photo by Becker, Don, USGS EROS, USFWS on Pixnio

Step 5 - Put it on display

When you're happy with the cleaning, put it on display in the case you designed!



Challenge!

Can you build a display for the other materials you excavated? Do you think it's important to research other items uncovered with dinosaurs? Why or why not?

The answer is yes! Anything discovered near dinosaurs can teach us more about them.

The First Dinosaur on Display

Hadrosaurus foulkii was the first ever dinosaur on display to the public. This dinosaur was exhibited at the Academy of Natural Sciences in Philadelphia, Pennsylvania in 1868. It attracted so many people that they had to build new facilities to accommodate all the visitors!



Jim, the Photographer from Springfield PA, United States of America, CC BY 2.0 <<https://creativecommons.org/licenses/by/2.0>>, via Wikimedia Commons

Today, dinosaurs are still some of the biggest attractions world wide. Beyond museum walls, there are countless books, movie, toys, and other formats of entertainment related to dinosaurs for people to enjoy.

Can you find dinosaurs in Wisconsin?

The simple answer is no. Wisconsin was shaped and formed by moving glaciers from 70,000-10,000 years ago. Because of this, if there were any dinosaurs here before, they were all pushed south and west along with the glaciers

The only evidence of dinosaur fossils in Wisconsin were discovered by chance. In 2007, when a geologist from Minnesota was beginning to build his cabin near River Falls, Wisconsin, he noticed something different about the ground he was digging on. He called the geology department at the University of Wisconsin - River Falls, and they uncovered a fossil of two laurel leaves from the Cretaceous period.

In the United States there are 35 states with recorded dinosaur fossil findings so far. The top five states with the most fossils are California, Wyoming, Montana, Florida, and New Mexico.



<http://archive.jsonline.com/news/wisconsin/44755302.html/>

Go Beyond

What kind of dinosaur learning experiences do you think you can come up with to teach others about them? What about creating your own book or movie? Or designing your own dinosaur park like the popular Jurassic Park series?

What did you learn from this Take and Make Kit about dinosaurs and paleontology and how can you share that experience with others?

HANG OUT,
MESS
AROUND,
GEEK OUT.



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